

WHAT IS CLAIMED IS:

1. An apparatus for processing information, connected to another information processing apparatus through a network, comprising:

storage means for storing first position information representing an initial position of said information processing apparatus, and second position information representing an initial position of said another information processing apparatus when communication is established with said another information processing apparatus;

receiver means for receiving data from said another information processing apparatus;

acquisition means for acquiring third position information representing a current position of said information processing apparatus;

first determining means for determining whether the third position information acquired by said acquisition means corresponds to the first position information stored in said storage means; and

authenticator means for authenticating the data received by said receiver means, based on a result of determination provided by said first determining means.

2. An apparatus according to claim 1, further

comprising:

reader means for reading fourth position information of said information processing apparatus, forming a destination address, and fifth position information of said another information processing apparatus, forming a source address, contained in the data received by the said receiver means, when the result of determination provided by said first determining means indicates that the third position information fails to correspond to the first position information; and

second determining means for determining whether the fifth position information read by said reader means corresponds to the second position information stored in said storage means.

3. An apparatus according to claim 2, further comprising substituting means for substituting the first position information for the fourth position information when the result of determination provided by said first determining means indicates that the third position information fails to correspond to the first position information.

4. An apparatus according to claim 2, further comprising substituting means for substituting the second

position information for the fifth position information when the result of determination provided by said second determining means indicates that the fifth position information fails to correspond to the second position information.

5. An apparatus according to claim 2, wherein the fourth position information is assigned to a portion of the most significant bits of the destination address.

6. An apparatus according to claim 2, wherein the fifth position information is assigned to a portion of the most significant bits of the source address.

7. An apparatus according to claim 1, wherein said authenticator means uses the first and second position information to authenticate the data received by said receiver means.

8. An apparatus according to claim 1, further comprising notifying means for notifying an information storage device connected to said network of the fourth position information representing the current position of said information processing apparatus, and identification information identifying said information processing

apparatus, when said information processing apparatus is connected to another network.

9. An apparatus according to claim 8, wherein said identification information is a terminal identifier identifying said information processing apparatus over said network.

10. An apparatus according to claim 1, further comprising reset means for resetting the first and second position information stored in said storage means when communication with said another information processing apparatus is disconnected.

11. A method for processing information, for an information processing apparatus that is connected to another information processing apparatus through a network, said method comprising:

a step of controlling storage of first position information representing an initial position of said information processing apparatus, and of second position information representing an initial position of said another information processing apparatus when communication is established with said another information processing apparatus;

a step of receiving data from said another information processing apparatus;

a step of acquiring third position information representing a current position of said information processing apparatus;

a step of determining whether the third position information acquired in said acquisition step corresponds to the first position information, storage of which is controlled in said controlling step; and

a step of authenticating the data received in said receiving step, based on a result of determination provided in said determining step.

12. A storage medium storing a computer-readable software program for controlling an information processing apparatus that is connected to another information processing apparatus through a network, said software program comprising program codes for:

a step of controlling storage of first position information representing an initial position of said information processing apparatus, and of second position information representing an initial position of said another information processing apparatus when communication is established with said another information processing apparatus;

a step of receiving data from said another information processing apparatus;

a step of acquiring third position information representing a current position of said information processing apparatus;

a step of determining whether the third position information acquired in said acquisition step corresponds to the first position information, storage of which is controlled in said controlling step; and

a step of authenticating the data received in said receiving step, based on a result of determination provided in said determining step.

13. A software program executed by a computer that is connected to another information processing apparatus through a network, said software program comprising program codes for:

a step of controlling storage of first position information representing an initial position of said information processing apparatus, and of second position information representing an initial position of said another information processing apparatus when communication is established with said another information processing apparatus;

a step of receiving data from said another information

processing apparatus;

a step of acquiring third position information representing a current position of said information processing apparatus;

a step of determining whether the third position information acquired in said acquisition step corresponds to the first position information, storage of which is controlled in said controlling step; and

a step of authenticating the data received in said receiving step, based on a result of determination provided in said determining step.

14. An apparatus for processing information, connected to another information processing apparatus through a network, comprising:

storage means for storing first position information representing an initial position of said information processing apparatus, and second position information representing an initial position of said another information processing apparatus when communication is established with said another information processing apparatus;

first acquisition means for acquiring third position information representing a current position of said information processing apparatus;

first determining means for determining whether the

third position information acquired by said first acquisition means corresponds to the first position information stored in said storage means;

second acquisition means for acquiring fourth position information representing a current position of said another information processing apparatus;

second determining means for determining whether the fourth position information acquired by said second acquisition means corresponds to the second position information stored in said storage means; and

transmitter means for transmitting data to said another information processing apparatus, based on results of determination provided by said first and second determining means.

15. An apparatus according to claim 14, further comprising substituting means for substituting the first position information for the third position information when the result of determination provided by said first determining means indicates that the third position information fails to correspond to the first position information.

16. An apparatus according to claim 14, further comprising substituting means for substituting the second

position information for the fourth position information when the result of determination provided by said second determining means indicates that the fourth position information fails to correspond to the second position information.

17. An apparatus according to claim 14, further comprising:

calculating means for calculating additional information, to be added to the data, from the first and second position information stored in said storage means; and

adding means for adding said additional information calculated by said calculating means to the data,

wherein said transmitter means sets, at a source address, the third position information acquired by said first acquisition means, sets, at a destination address, the fourth position information acquired by said second acquisition means, and transmits the data to which the additional data has been added by said adding means.

18. An apparatus according to claim 17, wherein the third position information is assigned to a portion of the most significant bits of the destination address.

19. An apparatus according to claim 17, wherein the fourth position information is assigned to a portion of the most significant bits of the source address.

20. An apparatus according to claim 14, further comprising notifying means for notifying an information storage device connected to said network of the fifth position information representing the current position of said information processing apparatus, and identification information identifying said information processing apparatus, when said information processing apparatus is connected to another network.

21. An apparatus according to claim 20, wherein said identification information is a terminal identifier identifying said information processing apparatus over said network.

22. An apparatus according to claim 14, further comprising reset means for resetting the first and second position information stored in said storage means when communication with said another information processing apparatus is disconnected.

23. A method for processing information, for an

information processing apparatus connected to another information processing apparatus through a network, said method comprising:

a step of controlling storage of first position information representing an initial position of said information processing apparatus, and of second position information representing an initial position of said another information processing apparatus when communication is established with said another information processing apparatus;

a first acquisition step of acquiring third position information representing a current position of said information processing apparatus;

a first determining step of determining whether the third position information acquired in said first acquisition step corresponds to the first position information, storage of which is controlled in said controlling step;

a second acquisition step of acquiring fourth position information representing a current position of said another information processing apparatus;

a second determining step of determining whether the fourth position information acquired in said second acquisition step corresponds to the second position information, storage of which is controlled in said

controlling step; and

a transmitting step of transmitting data to said another information processing apparatus, based on results of determination provided in said first and second determining steps.

24. A storage medium storing a computer-readable software program for controlling an information processing apparatus connected to another information processing apparatus through a network, said computer-readable software program comprising program codes for:

a step of controlling storage of first position information representing an initial position of said information processing apparatus, and of second position information representing an initial position of said another information processing apparatus when communication is established with said another information processing apparatus;

a first acquisition step of acquiring third position information representing a current position of said information processing apparatus;

a first determining step of determining whether the third position information acquired in said first acquisition step corresponds to the first position information, storage of which is controlled in said

controlling step;

a second acquisition step of acquiring fourth position information representing a current position of said another information processing apparatus;

a second determining step of determining whether the fourth position information acquired in said second acquisition step corresponds to the second position information, storage of which is controlled in said controlling step; and

a transmitting step of transmitting data to said another information processing apparatus, based on results of determination provided in said first and second determining steps.

25. A software program executed by a computer connected to another information processing apparatus through a network, said software program comprising program codes for:

a step of controlling storage of first position information representing an initial position of said information processing apparatus, and of second position information representing an initial position of said another information processing apparatus when communication is established with said another information processing apparatus;

a first acquisition step of acquiring third position information representing a current position of said information processing apparatus;

a first determining step of determining whether the third position information acquired in said first acquisition step corresponds to the first position information, storage of which is controlled in said controlling step;

a second acquisition step of acquiring fourth position information representing a current position of said another information processing apparatus;

a second determining step of determining whether the fourth position information acquired in said second acquisition step corresponds to the second position information, storage of which is controlled in said controlling step; and

a transmitting step of transmitting data to said another information processing apparatus, based on results of determination provided in said first and second determining steps.